UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,850	11/30/2001	Daniel J. Aldrich	1708	9608

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	EXAMINER
	TRUONG, LECHI

ART UNIT	PAPER NUMBER
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DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _05 January 2006_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-24_ is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) _14 and 19_ is/are allowed.

6)☒ Claim(s) _1-16 and 18_ is/are rejected.

7)☐ Claim(s) _17_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some *   c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-8, 11-14, 16-24 are presented for the examination. Claims 9-10, 15 are

canceled.

Claim Objections

2.   Claim 11 is objected to because of the following informalities: It is unclear to define

where the claim 11 depended on. The claim 11 is depended on the canceled claim 10.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

3.   Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards et al (US.

6,353,819 B1) in view of McCormack et al (US. 5,181,171).

        As to claim 1, Edwards teaches the invention substantially as claimed including: a first

architecture layer (the RAM Codegen Executor Component layer 204, col 5, ln 19/ Fig. 2),

transparent layer (the record file manager component layer 206, col 5, ln 5-7/ Fig. 2), a second

layer (the IO Random controller component layer 208, col 5, ln 20-25/ Fig. 2), the layer enabling

the first layer and the second layer to communicate directly without having to communicate via

the layer (col 2, ln 55-60/col 3, ln 13-17/col 5, ln 64-67/ col 9, ln 13-18)/ the record file manage

component layer 206 is located between the layer 204 and 208(Fig.2), the layer 206 is

transparent layer since the communication between layer 204 and 208 can be performed by

bypassing or eliminating the layer 206 resulting in increases performance (col 3, ln 15-17/ col 5,

ln 64-68/ col 6, ln 43-47/ col 7, ln 1-5 and ln 20-25), architecture (component, col 2, ln 52-55).

Edward does not explicitly teach the plurality of transparent architecture layers.

However, Mccormack teaches the plurality of transparent architecture layer (The layer of nodes

44... is referred to as a middle, or hidden, layer, col 7, ln 3-10/ links with skip hidden layer in the

network, col 25, ln 46-48/ reduction of the number links in the network 50 which is enabled by

providing links 48 which skip the hidden layer of nodes, col 8, ln 64-68).

It would have been obvious to one of the ordinary skill in the art at the time the invention

was made to combine the teaching of Edwards and Mccormack because Mccormack's

component would improve the efficiency of Edwards's systems by allowing more rapid

convergence during training of the network to optimize the performance of network.

4.   Claims **2-8, 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards

et al (US. 6,353,819 B1) in view of Beer (US. Patent 5,793,368).

As to claim 2, Edwards teaches a first layer object (the RAM Codegen Executor

Component layer 204, col 5, ln 19/ Fig. 2), a transparent layer object (the record file manager

component layer 206, col 5, ln 5-19/ Fig. 2), a second layer (the IO Random controller

component layer 208, col 5, ln 20-25/ Fig. 2), the layer object configured to be hidden for

communication between the first layer object and the second layer object/ the communication

between each other by bypassing the layer (col 2, ln 55-60/col 3, ln 13-17/col 5, ln 9-19 and ln 54-67), a user interface attachable to the first layer object and configured to receive data, to transmit the data to the first layer object , to receive data from first layer object and to render the other object(input/out put units 16-1, col 3, ln 48-51/ a user enter queries derived from a database query language, such as SQL, into the database in order to obtain or extract request data, col 1, ln 35-38/ Optimizer component 202 processes the SQL query , col 5, ln 42-45 and the data obtained for the query is to be returned to a user, col 5, ln 51-53).

Edwards does not teach a selected user interface type dynamically selectable and dynamically interchangeable from a plurality of user interface types. However, Beer teaches a selected user interface type dynamically selectable and dynamically interchangeable from a plurality of user interface types (dynamically switch between visual styles, col 2, ln 10-15/ multiple selectable visual style, col 2, ln 43-46).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Edwards and Beer because Beer's dynamically switch between visual styles would improve the efficiency of Edwards's system by reducing security risks when loading applications from servers.

As to claim 3, Edwards teaches a group comprising a control message, data (col 5, ln 44-48).

As to claim 4, Edwards teaches the first layer object is configured to transmit the communication to the second layer object (col 5, ln 5-9).

As to claim 5, Edwards teaches the second layer object is configured to transmit the communication to the first layer object (col 8, ln 27-32).

As to claim 6, Edwards teaches collapse the transparent layer object when the first layer object and the second layer object relay the communication (col 2, ln 55-60/col 3, ln 13-17/col 5, ln 9-19 and ln 54-67).

As to claim 7, Edwards teaches a plurality of transparent layer objects (a multi-layered relational database manager, col 2, ln 49-50).

As to claim 8, Edward teaches configured the communication comprises data(col 5, ln 48-50).

As to claim 11, Edwards teaches a graphical user interface, a web enable interface, a handles device interface, a voice simulate interface, a voice response interface, a voice activated interface, a voice recognition interface, and an audio interface (col 1, ln 18 -25).

5.   Claims **12 and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards et al (US. 6,353,819 B1) as applied to claim 1 above, in view of Rick (CA Ship Database-Management Suite For E-Commerce).

As to claim 12, Edwards does not teach a plurality of databases, each database having a different database type. However, Rick teaches a plurality of databases, each database having a different database type (the oracle database... Sybase data bases, page 1, ln 22-23).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Edwards and Rick because Rick's a plurality of databases and each database having a different database type would improve the efficiency of Edwards's system by providing greater availability single instance accessing a single database.

As to claim 13, Rick teaches a structured query language database, an Oracle database, a

DB2 database, and an XML-based database (page 1, ln 22 –23).

4.   Claims **14, 16 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Edwards et al (US. 6,353,819 B1) in view of Kung (US. Patent 5,933,837) and further in view of

in view of Beer (US. Patent 5,793,368).

As to claim 14, Edwards teaches an province configured (MFM component layer 206,

col 8, ln 30-32), an action province configured with logic to process an action and to generate at

least one query requesting data (col 5, ln 14-17/col 8, ln 53-56), query requesting data (col 5, ln

45-48), a yoke province (RAM Codegen Executor layer 204, col 5, ln 33), identify a database

with a database type to which the query corresponds (col 5, ln 42-44), initiate a connection with

the database to transmit the query to the database(col 5, ln 45-48), retrieve data in response to

the query(col 5, ln 47-50), transmit the data to the action province(col 8, ln 29-32), a witness

province(the Io Random Controller component layer 208, col 5, ln 20-21), the witness province

configured to identify the action occurring via an input/output interface (col 5, ln 20-23), notify

with the action at least one member of a group(col 8, ln 51-53), at least one layer configured to

enable communication with a surrounding layer without having to communicate via the layer(

col 2, ln 55-60/col 3, ln 13-17/col 5, ln 9-19 and ln 65-67).

Edwards do not explicit teach dynamically identify a database with a database type to

which the query corresponds. However, Kung teaches dynamically identify a database with a

database type to which the query corresponds (determines which of subscribe databases requires

translations and subsequently translates the queries into appropriate formats based on the types

of subscribing database models, col 3, ln 55-60/ predetermined or sample query descriptions that

can be used by query manager to construct queries appropriate for each of subscribing databases

122, 124, 126(fig.1), col 4, ln 64-67/ col 5, ln 1-5).

I would have been obvious to one of the ordinary skill in the art at the time the invention

was made to combine the teaching of Edwards and Kung because Kung's dynamically identify a

database with a database type to which the query corresponds would improve the efficiency of

Edward's system by providing a system that correctly propagates the update in the primary data

only to subscribing databases that need to access.

Edwards and Kung do not teach a selected user interface type dynamically selectable and

dynamically interchangeable from a plurality of user interface types. However, Beer teaches a

selected user interface type dynamically selectable and dynamically interchangeable from a

plurality of user interface types (dynamically switch between visual styles, col 2, ln 10-15/

multiple selectable visual styles, col 2, ln 43-46).

It would have been obvious to one of the ordinary skill in the art at the time the invention

was made to combine the teaching of Edwards, Kung and Beer because Beer's dynamically

switch between visual styles would improve the efficiency of Edwards and Kung's systems by

reducing security risks when loading applications from servers.

As to claim 16, Edwards teaches apply logic to action and to direct transfers of the action

the query (col 8, ln 44-46), store the data (col 8, ln 53-56), initiate storage and retrieval of the

data to and from the database by identifying the database and generating the query for the

database (col 8, ln 27-32), format the query generated from the persistent layer to the database

format required by the database (col 5, ln 10-16).

As to claim 18, Edwards teaches the witness yoke province comprises a nomadic layer

object configured to make a connection to the database and to pass the query to the database (col

5, ln 20-25/col 8, ln 44-46).

Allowable Subject Matter

6.   Claim **17** is objected to as being dependent upon a rejected base claim, but would be

allowable if rewritten in independent form including all of the limitations of the base claim and

any intervening claims.

7.   Claims **19-24** are allowed.

Response to the argument:

8.   Applicant amendment filed on 9/03/04 has been considered but they are not persuasive:

Applicant argued in substance that :

(1) " Beer only discusse the GUI , which is a single interface type, unlike the plurality of

interface types of claim 2 ".

(2) " the other possible interface types provides in the present application , as

emunerated in claim 11 , include a web enable interface, a handle device interface, voice related

interfaces, and the like" .

9.   Examiner respectfully disagreed with Applicant's remarks:

As to the point (1), Beer teaches the virtual style setting determine how a user interce

control is displey . Therfore, each virtual style will be represented for different user interface

type(col 11, ln 6-9). Window 95 stype and Motif stype are two different user interface stypes.

As to the point (2), a web enable interface, a handle device interface, voice related

interfaces, and the like was not in the claims 1 and 14.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The

examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR of Public PAIP. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIP

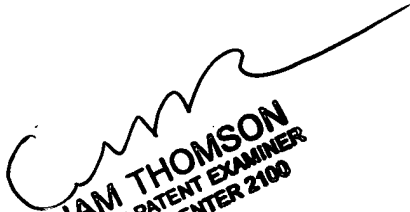system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

March 14, 2006

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100